

**** CONFIDENTIAL ****
 ****PRE-DECISIONAL DOCUMENT ****
 **** SUMMARY SCORESHEET ****
 **** FOR COMPUTING PROJECTED HRS SCORE ****

**** Do Not Cite or Quote ****

Site Name: Columbia Smelting & Refining Works Region: Region 2

Scenario Name: Soil Contamination

City, County, State: Brooklyn, Kings, New York Evaluator: Denise Breen

EPA ID#: NYN000206593

Date: 02/20/2015

Lat/Long: 40:40:26,-74:0:21

Congressional District: 07

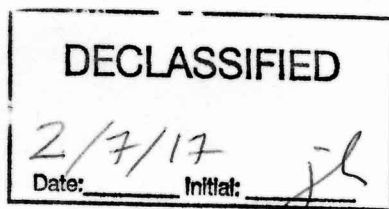
This Scoresheet is for: Columbia Smelting & Refining Works

Scenario Name: Soil Contamination

Description:

	S pathway	S ² pathway
Ground Water Migration Pathway Score (S _{gw})	0.0	0.0
Surface Water Migration Pathway Score (S _{sw})	0.0	0.0
Soil Exposure Pathway Score (S _s)	3.5	12.25
Air Migration Score (S _a)	3.65	13.32
$S_{gw}^2 + S_{sw}^2 + S_s^2 + S_a^2$		25.57
$(S_{gw}^2 + S_{sw}^2 + S_s^2 + S_a^2)/4$		6.39
$/(S_{gw}^2 + S_{sw}^2 + S_s^2 + S_a^2)/4$		2.53

Pathways not assigned a score (explain):



213015

TABLE 5-1 --SOIL EXPOSURE PATHWAY SCORESHEET

Factor categories and factors	Maximum Value	Value Assigned
Likelihood of Exposure:		
1. Likelihood of Exposure	550	550.0
Waste Characteristics:		
2. Toxicity	(a)	10000.0
3. Hazardous Waste Quantity	(a)	10.0
4. Waste Characteristics	100	18.0
Targets:		
5. Resident Individual	50	0.0
6. Resident Population:		
6a. Level I Concentrations	(b)	0
6b. Level II Concentrations	(b)	0.0
6c. Population (lines 6a + 6b)	(b)	0.0
7. Workers	15	5.0
8. Resources	5	
9. Terrestrial Sensitive Environments	(c)	
10. Targets (lines 5 + 6c + 7 + 8 + 9)	(b)	5.0
Resident Population Threat Score		
11. Resident Population Threat Score (lines 1 x 4 x 10)	(b)	49500.0
Nearby Population Threat		
Likelihood of Exposure:		
12. Attractiveness/Accessibility	100	100.0
13. Area of Contamination	100	40.0
14. Likelihood of Exposure	500	250.0
Waste Characteristics:		
15. Toxicity	(a)	10000.0
16. Hazardous Waste Quantity	(a)	10.0
17. Waste Characteristics	100	18.0
Targets:		
18. Nearby Individual	1	1.0
19. Population Within 1 Mile	(b)	52.1
20. Targets (lines 18 + 19)	(b)	53.1
Nearby Population Threat Score		
21. Nearby Population Threat (lines 14 x 17 x 20)	(b)	238950.0
Soil Exposure Pathway Score:		
22. Pathway Score ^d (S _s), [(lines (11+21)/82,500, subject to max of 100]	100	3.5

^a Maximum value applies to waste characteristics category

^b Maximum value not applicable

^c No specific maximum value applies to factor. However, pathway score based solely on terrestrial sensitive environments is limited to a maximum of 60

^d Do not round to nearest integer

TABLE 6-1 --AIR MIGRATION PATHWAY SCORESHEET

Factor categories and factors	Maximum Value	Value Assigned
Likelihood of Release:		
1. Observed Release	550	0.0
2. Potential to Release:		
2a. Gas Potential to Release	500	0.0
2b. Particulate Potential to Release	500	280.0
2c. Potential to Release (higher of lines 2a and 2b)	500	280.0
3. Likelihood of Release (higher of lines 1 and 2c)	550	280.0
Waste Characteristics:		
4. Toxicity/Mobility	(a)	2.0
5. Hazardous Waste Quantity	(a)	10.0
6. Waste Characteristics	100	2.0
Targets:		
7. Nearest Individual	50	20.0
8. Population:		
8a. Level I Concentrations	(b)	0.0
8b. Level II Concentrations	(b)	0.0
8c. Potential Contamination	(c)	518.2
8d. Population (lines 8a + 8b + 8c)	(b)	518.2
9. Resources	5	0.0
10. Sensitive Environments:		
10a. Actual Contamination	(c)	0.0
10b. Potential Contamination	(c)	0.07
10c. Sensitive Environments (lines 10a + 10b)	(c)	0.07
11. Targets (lines 7 + 8d + 9 + 10c)	(b)	538.27
Air Migration Pathway Score:		
12. Pathway Score (S_a) $[(\text{lines } 3 \times 6 \times 11)/82,500]^d$	100	3.65

^a Maximum value applies to waste characteristics category

^b Maximum value not applicable

^c No specific maximum value applies to factor. However, pathway score based solely on sensitive environments is limited to a maximum of 60.

^d Do not round to nearest integer